

## WHAT IS CLAIMED IS:

1. A container, comprising:
  - a first layer of plastic; and
  - 5 a second layer of plastic contacting said first layer, said second layer of plastic formed as a foam wherein the foam cells contain carbon dioxide.
- 10 2. The container according to Claim 1, wherein the first layer of plastic comprises a plastic selected from the group consisting of polyesters, acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.
- 15 3. The container according to Claim 1, wherein the first layer of plastic comprises a polyester.
4. The container according to Claim 1, wherein the  
20 first layer of plastic comprises polyethylene terephthalate.
5. The container according to Claim 1, wherein the second layer of plastic comprises a plastic selected  
25 from the group consisting of polyesters, acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.

6. The container according to Claim 1, wherein the second layer of plastic comprises a polyester.

7. The container according to Claim 1, wherein the second layer of plastic comprises polyethylene terephthalate.

8. The container according to Claim 1, wherein the first and second layers of plastic are the same.

9. The container according to Claim 1, wherein the first and second layers of plastic are different.

10. The container according to Claim 1, wherein the foam cells contain a gas comprising a gas selected from the group consisting of carbon dioxide, nitrogen, argon, air, and blends and derivatives thereof.

11. The container according to Claim 1, wherein the foam cells contain a gas comprising carbon dioxide.

12. The container according to Claim 1, further comprising a third layer of plastic contacting said first layer of plastic, said third layer of plastic formed as a foam wherein the foam cells contain a gas.

13. The container according to Claim 12, wherein the third layer of plastic comprises a plastic selected from the group consisting of polyesters, acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.

14. The container according to Claim 12, wherein the third layer of plastic comprises a polyester.

15. The container according to Claim 12, wherein the third layer of plastic comprises polyethylene terephthalate.

16. The container according to Claim 12, wherein the gas in the foam cells of the third layer of plastic comprises a gas selected from the group consisting of carbon dioxide, nitrogen, argon, air, and blends and derivatives thereof.

17. The container according to Claim 12, wherein the gas in the foam cells of the third layer of plastic comprises carbon dioxide.

18. The container according to Claim 1, further comprising a third layer of plastic contacting said second layer of plastic.

19. The container according to Claim 18, wherein the third layer of plastic comprises a plastic selected from the group consisting of polyesters, acrylonitrile acid esters, vinyl chlorides, polyolefins, polyamides, and derivatives, blends, and copolymers thereof.

20. The container according to Claim 18, wherein the third layer of plastic comprises a polyester.

21. The container according to Claim 18, wherein the third layer of plastic comprises polyethylene terephthalate.

22. A multilayer preform, comprising:  
a first layer of plastic; and  
a second layer of plastic contacting said first layer, said second layer of plastic formed as a foam wherein the foam cells contain carbon dioxide.

23. A multilayer preform, comprising:  
a first layer of polyethylene terephthalate;  
and  
a second layer of plastic contacting said first layer, said second layer of plastic formed as a foam wherein the foam cells contain carbon dioxide.

24. A multilayer preform; comprising:

a first layer of plastic;

a second layer of plastic contacting said  
first layer, said second layer of plastic formed as  
5 a foam wherein the foam cells contain carbon  
dioxide; and

a third layer of polyethylene terephthalate  
contacting said first layer of plastic, said third  
layer of polyethylene terephthalate formed as a  
10 foam wherein the foam cells contain a gas.

25. A multilayer preform; comprising:

a first layer of plastic;

a second layer of plastic contacting said  
15 first layer, said second layer of plastic formed as  
a foam wherein the foam cells contain carbon  
dioxide; and

a third layer of polyethylene terephthalate  
contacting said second layer of plastic.

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